

Patent
Attorney Docket: LYNN/0122

REMARKS

Claims 1, 2, 7, 8, 9 and 10 stand rejected under 35 U.S.C. 102(b) as being anticipated by JP 409256649 (JP '649). JP '649 discloses a disassembling method for reinforced concrete structures. As the Examiner has pointed out, JP '649 does not disclose alternating the polarity of the potential being applied between the iron-containing member and the counter electrode. (Office Action, p. 3). Applicant has amended claim 1 to include the limitation cited by the Examiner as not being disclosed by JP '649. Applicant has cancelled claim 6, which had claimed alternating the polarity of the potential. Applicant had paragraphs 7-22 of JP '649 translated and has attached a copy of the translation for the convenience of the Examiner.

As taught in the MPEP, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. (MPEP § 2131).

JP '649 does not include each and every limitation claimed by Applicant in amended claim 1 and therefore, a *prima facie* case of anticipation of claim 1, as amended, is not presented. Therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection of independent claim 1, and of dependent claims 2 and 7-10 that depend therefrom.

Claims 3-6 and 11-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 409256649 in view of Hock "Demonstration of Electro-Osmotic Pulse Technology for Groundwater Intrusion Control in Concrete Structures" 1998. JP '649 disclosed a method of disassembling concrete that included attaching the terminals of a DC power source to a reinforcing rod in concrete as the anode and to a wire mesh covering the surface of the concrete as the cathode. As the Examiner pointed out, JP '649 did not disclose, suggest or teach that the polarity of these electrodes should be switched. (Office Action, p. 2).

Houck disclosed a system that applied electro-osmotic pulse (EOP) technology commercially within concrete structures by applying a pulsating electric field combined with an off period. (Houck, p. 6). The electrical pulse causes cations and associated water molecules to move from the dry side of the concrete towards the wet side. *Id.* Houck also disclosed that the advantage of the

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pulse system over standard DC electro-osmosis is that the change in polarity results in the reversal of some of the chemical reactions that occur during electrolysis and as such, undesirable side effects, at least for the purposes of Houck, such as acid production and increased corrosion, are avoided. (Houck, p. 11).

However, Applicant claims a method for demolishing concrete and does not seek to minimize acid production and increased corrosion. Houck actually teaches against reversing polarity as Applicant claims. (Claim 1). As Applicant discloses in the Specification, the present invention utilizes a constant electric field to cause the migration of moisture into the concrete block or porous material followed by the oxidation of the rebar within the concrete. (Specification, p. 11, 12-19). Reversing the polarity necessarily causes the extraction of water from the cell along with hydrous iron oxides to the surface of the concrete. *Id.* at ln. 5-12. Removing the iron oxides from the vicinity of the cell allows more corrosion to occur. Houck discloses that the current is pulsed every 2 to ten seconds. (Houck, FIG. 3).

Applicant claims alternating the polarity of the constant electrical potential and does not claim pulsing the current as taught by Houck. Houck teaches that by pulsating the current, less corrosion and acid production occurs while Applicant desires high corrosion rates.

To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

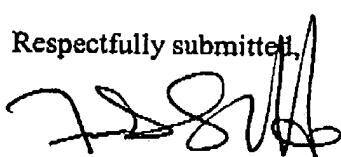
Furthermore, a prior art reference that teaches away from the claimed invention is the antithesis of the art suggesting that the person of ordinary skill go in the claimed invention. *In re Fine*, 873 F.2d 1071 (Fed. Cir. 1988). Essentially, teaching away from the art is a *per se* demonstration of lack of *prima facie* obviousness.

Because the cited prior art does not teach Applicant's claimed limitation of "alternating the polarity of the constant electrical potential being applied between the iron-containing member and the counter electrode," and because the cited art actually teaches away from this limitation, Applicant respectfully asserts that a *prima facie* case of obviousness has not been presented. Reconsideration and withdrawal of the rejection is respectfully requested.

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Applicant respectfully asserts that all claims are now in condition for allowance and requests that a Notice of Allowance issue in the near future. If the Examiner believes that a telephone conference would expedite the examination of the application, the Examiner is invited to telephone the below signed attorney at the convenience of the Examiner. In the event there are additional charges in connection with the filing of this Response, the Commissioner is hereby authorized to charge the Deposit Account No. 50-0714/LYNN/0122 of the firm of the below-signed attorney in the amount of any necessary fee.

Respectfully submitted,



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